

Application Note

Using a Risc PC with Nexus



Installing the Nexus Interface Card

The Risc PC can be used with a Nexus A5000/540/4x0/310 Interface Card (34INN01), which fits in one of its expansion slots, or with the Nexus Risc PC Interface Card (RIPCNO1), which fits the network card socket. Full instructions for fitting interface cards are given in the Risc PC Welcome Guide. **Remember to observe anti-static precautions** when handling interface cards – see the warning slip packed with the cards for more information.

Please note that the Risc PC Interface Card can only be used with Nexus Networking systems (see next section); if you wish to use a Risc PC with an older Nexus disc sharer you will have to fit an A5000 (etc) interface card.

Nexus Networking (and Networking compatible) systems

- **To check whether your system is networking compatible:** On a computer which is known to work with the Nexus, press F12 and enter *Podules. You will obtain output similar to:

```
Podule 0: Nexus Network Interface 2.14 (Standard Card)
Podule 1: No installed podule
Podule 2: No installed podule
Podule 3: No installed podule
```

Look at the line relating to the Nexus interface card; this includes a version number – 2.14 in the example above. There are three possible cases:

1. **Version number 2.14 or greater:** Your system is networking compatible and this section of this release note applies.
 2. **Version number between 2.00 and 2.13:** Your system is networking compatible but requires an upgrade to the later specification; please contact our Technical Support number to arrange this.
 3. **Version number less than 1.00:** Your system is not networking compatible; please refer to the later section of this release note. If the ROM version is less than 0.27 you will need to purchase a ROM upgrade to 0.27.
- To operate with the Risc PC your Nexus interface card must be fitted with ROM version 2.19 or later. The version number will appear on the ROM label; if the interface card is already installed in a computer its ROM version can be determined as described above.
 - Your Nexus disc sharer needs to have version 2.18 or later of the Nexus !Boot application installed. The version of !Boot can be determined by opening a window onto the Nexus drive 4, pressing **Menu** over the !Boot icon and choosing **App . '!Boot' => Help**. If you have an older version of !Boot installed then please contact our Technical Support number to request a free upgrade.
 - If you have the correct version of !Boot installed on the Nexus hard disc then you can simply connect the Risc PC to Nexus and power on with the X key held down. (Note that it is **essential** you have **not** locked the Risc PC's hard disc at this stage.) You will need to hold the X key down rather longer than with other computers – keep it held down until the Risc PC starts printing messages relating to its own boot sequence, such as information about choices.

This process modifies the !Boot on the Risc PC so that it refers to the !Boot on the Nexus disc. It leaves the computer configured to boot from the Risc PC hard disc but ensures that the Nexus boot sequence is run within the Risc PC boot application (*Status will show the FileSystem configured to ADFS, not Nexus).

You may need to modify the contents of your Nexus !Boot.PreDesktop and !Boot.Deskstart files to make some operations dependent on the file not being run from a Risc PC; for example trying to RMKill !Configure on a Risc PC will generate an error. Operations can be made conditional in this way using the RiscOS\$Version variable; e.g.

```
If RiscOS$Version >= 300 AND RiscOS$Version < 350 Then RMKill !Configure
```

will only carry out the RMKill on computers running RISC OS 3.0 or 3.1 (but will still generate an error if the module is already unplugged).

- **Integration of different !Fonts folders:** this is achieved by the installation process just described. The !Fonts present on the Risc PC take precedence over those installed on the Nexus hard disc. This may mean

that documents created on the Risc PC cannot be used on other computers. To avoid this problem you can copy all the fonts from !Boot.Resources.!Fonts on the Risc PC hard disc into !Fonts on the Nexus hard disc. Within the Nexus version of !Fonts, the Sassoon font goes into the RO3_Fonts directory and all other fonts go into the Std_Fonts directory. Clearly the Risc PC will need to be plugged into the Nexus management port to carry out this (and the next) operation.

- **Integration of !System:** The process described above will leave you with the path for !System set up exactly as for any other Nexus station, ignoring the !System on the Risc PC's hard disc. To avoid possible problems you should SysMerge the !System on the Risc PC (!Boot.Resources.!System) into the !System on the Nexus drive 4.

Non-networking Nexus systems

It is essential that you do not run any part of the !Boot on the Nexus hard disc. The Risc PC must boot from its own hard disc and its !Boot application must be modified to ensure that the appropriate Nexus modules are loaded.

Your disc sharer needs to be running Nexus disc sharer software version 0.61. To check this, go to one of the computers on the Nexus system which has booted from Nexus, press F12 and enter *NexusVers. If this does not show your disc sharer to be running version 0.61 (e.g. if it generates an error) please contact the Technical Support number for advice. It will be helpful if you can note the serial number of your disc sharer (to be found on the back of the sharer) and locate your latest Nexus Utility Software disc before phoning.

To modify the Risc PC !Boot you need the Nexus Utility Software disc dated 22nd October 1992. On this disc you will find a copy of !Boot inside the directory Dollar. Shift-double-click on the !Boot icon to open a window on the contents of the !Boot applications. In this window there will be a Modules directory; double-click on this to open it. Copy the modules NexusStdD, NexusFS, NexusFiler and NexusPrint from this directory into the directory !Boot.Choices.Boot.PreDesk on the Risc PC. Once this has been done simply re-boot the Risc PC. When the Risc PC starts up it will now load the new Nexus modules and will be able to access the Nexus sharer.

Note that this means that a user on the Risc PC will not automatically see the same environment as a user on any other Nexus station. In particular the Risc PC will be accessing the copies of !Fonts and !System on its own hard disc, and will not have executed any instructions contained in the Nexus !Boot.Deskstart file. The easiest response to this is probably to:

- Update the !System on the Risc PC (!Boot.Resources.!System) to match that on the Nexus disc sharer. Do not use the Risc PC !Boot/!Configure system merging — use the !SysMerge application. You should simply SysMerge from the Nexus disc sharer into !System on the Risc PC.
- Update the !Fonts on the Risc PC (!Boot.Resources.!Fonts) to match that on the Nexus disc sharer.
- Configure the !Boot application on the Risc PC to match any other operations normally carried out within the Nexus boot sequence.

Risc PC Notes

- You are strongly advised not to modify the original directory structure supplied on the Risc PC. You may delete applications from within it (but do take backup copies onto floppy disc first!) and add to it as you wish, but changing it (e.g. moving an application from one place to another or deleting part of the directory structure) may cause the boot sequence to fail and/or the computer to behave in an unexpected way.
- Refer to the !Products database on the Risc PC for some additional information on Nexus compatibility. Note, however, that some of the information contained in this note supersedes that in the Products database.
- On a Nexus networking system, if your configuration has failed (most likely due to having a version of !Boot prior to 2.18) you should :

Press F12 and enter *Configure FileSystem ADFS on the Risc PC

Check whether there is a copy of !Scrap in directory \$ on the Risc PC's hard disc. If there is it should be deleted. (The Nexus boot sequence is likely to have installed a copy of !Scrap here; this may be indicated by the computer giving Expression is a string errors while booting.)

We recommend you then obtain a copy of the latest Nexus !Boot, install this on your Nexus disc sharer and then re-configure the Risc PC as described above.